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# Building Resilience; a simpler way to approach adaptation practice

National Adaptation Forum  
April 3, 2013  
Denver, CO

[www.i-s-e-t.org](http://www.i-s-e-t.org)



# Training agenda; Part 1

8:30-8:45	Introductions & ice breaker
8:45-9:00	Short Presentation
9:00- 9:10	Small group activity; mapping a core system
9:10 -9:25	Presentation and discussion
9:25-9:45	Small group activity; characteristics of resilience in core systems
9:45- 10:00	Intro to the Resilience Framework

Coffee Break!

# Training Agenda; Part 2

10:30 -11:00	The Resilience Framework: <ul style="list-style-type: none"><li>-Vulnerability Assessment</li><li>- Use of Shared Learning Dialogue &amp; iterative engagement</li><li>- Building resilience</li></ul>
11:00- 11:15	Plenary Discussion: Examples of Resilience Actions
11:15-11:25	Small Group Activity: Shared Learning Dialogues
11:25- 11:45	Discussion; Monitoring & Evaluation
11:45- 12:00	Closing

# Our Approach

Resilience;  
Change the way you think  
... Use what you already know  
(tools, strategies, methods and networks)

# Our Approach

Resilience;

the challenge is not about planning for what you can predict, but about planning for the uncertainty

- Systematic approach to complex challenges
- Change the way we think & approach issues
- use existing tools, methods and knowledge

# A systematic approach to thinking about complex challenges...



**INSTITUTIONS**



**PHYSICAL and  
ECO-SYSTEMS**



**AGENTS**



**DISRUPTION**



## **DISRUPTION**

An event such a climate or other natural hazard, economic downturn, food crisis, etc.



## **AGENTS**

Individuals, households, communities, businesses, government organizations, NGOs, etc.



## **INSTITUTIONS**

Rules and social conventions that guide interactions of agents with each other and access to systems



## **SYSTEMS**

Includes both physical infrastructure and ecosystems.

**Think of these as big baskets...**  
**Simple mental organizational tool**  
**Overlap is Ok**



**INSTITUTIONS**



**PHYSICAL and  
ECO-SYSTEMS**



**AGENTS**



**DISRUPTION**

# Small Group Activity

Identify:



## AGENTS

Individuals, households, communities, businesses, government organizations, NGOs, etc.



## INSTITUTIONS

Rules and social conventions that guide interactions of agents with each other and access to systems



## SYSTEMS

Includes both physical infrastructure and ecosystems.

**In core systems**

(water, land use planning, infrastructure, ecosystem services related ...)

Questions?

# **Resilience**

**Is Resilience the opposite of Vulnerability?**

**Does Resilience have an end state?**

**Can you arrive at “Resilient”?**



## **PHYSICAL and ECO-SYSTEMS**

Modularity and Redundancy  
Flexibility and Diversity  
Safe Failure



## **AGENTS**

Responsiveness  
Learn  
Resourcefulness



## **INSTITUTIONS**

Inclusive  
Informed  
Adaptable  
Good Governance



# Characteristics of Resilience SYSTEMS

## **Flexibility & Diversity**

Multiple water pumping stations in different locations handle variable water demand and will not all be affected by flood. Community flood shelters may be used as clinics or meeting halls.

## **Redundancy & Modularity**

Multiple pumps with backup energy supply for water system provides redundancy. Water tanker trucks provide modularity: if one fails the system is not seriously affected.

## **Safe failure**

Dikes and floodways channel extreme floods into wetlands or retention zones where they have minimal damage. Multiple forms of transport or access roads provide service to a community in case one fails.



# Characteristics of Resilience **AGENTS**

## **Responsive & Re-organizing**

Contingency planning for reservoir management under extreme events.  
DRR planning, training and re-structuring for community organizations.  
Household emergency preparedness.

## **Resourceful**

Increased awareness builds capacity to visualize and plan for future climate conditions.  
Vulnerable social groups are assured access to information, funding and essential services to enable adaptation.

## **Capacity to Learn**

Monitoring of performance of key systems and organizations leads to identification of opportunities for improvement



# Characteristics of Resilience **INSTITUTIONS**

## **Inclusive**

Institutions assure that marginalized social groups can access key systems and maximize their existing capacities. E.g. all community members have equal access to water and electricity.

## **Good Governance**

Decision-making processes are transparent, representative and accountable; diverse stakeholders have ways to provide meaningful input to decisions.

## **Informed**

Decision-makers can access the information needed to make judgments about risk and vulnerability, and to determine effective autonomous adaptation actions

## **Adaptable**

When presented with evidence of need to change, institutions can change or modify as needed

Questions?



## **PHYSICAL and ECO-SYSTEMS**

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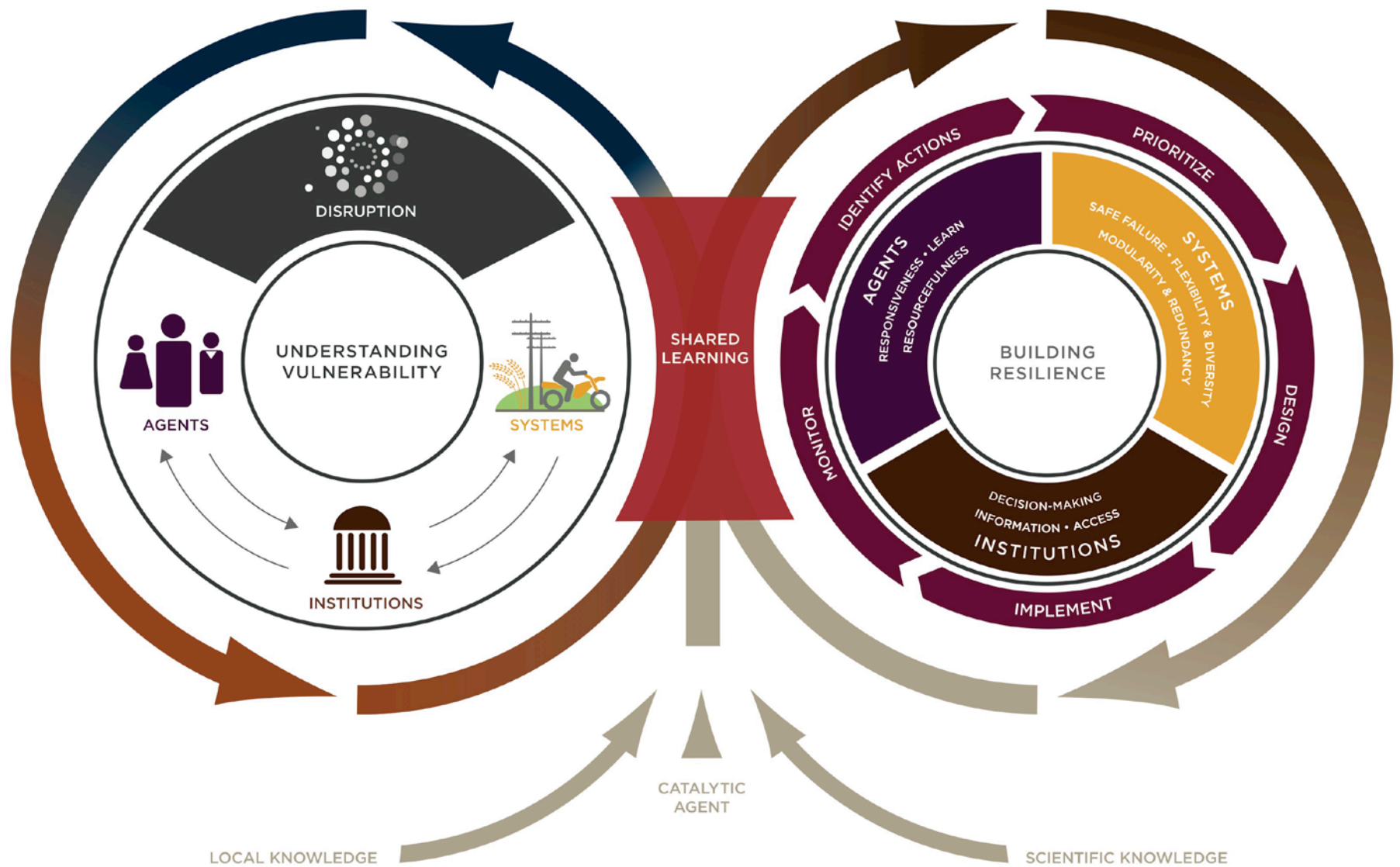
## **AGENTS**

Responsiveness  
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## **INSTITUTIONS**

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Good Governance



The Resilience Framework

.. More coming soon,  
after the break

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# Building Resilience; a simpler way to approach adaptation practice

## PART 2

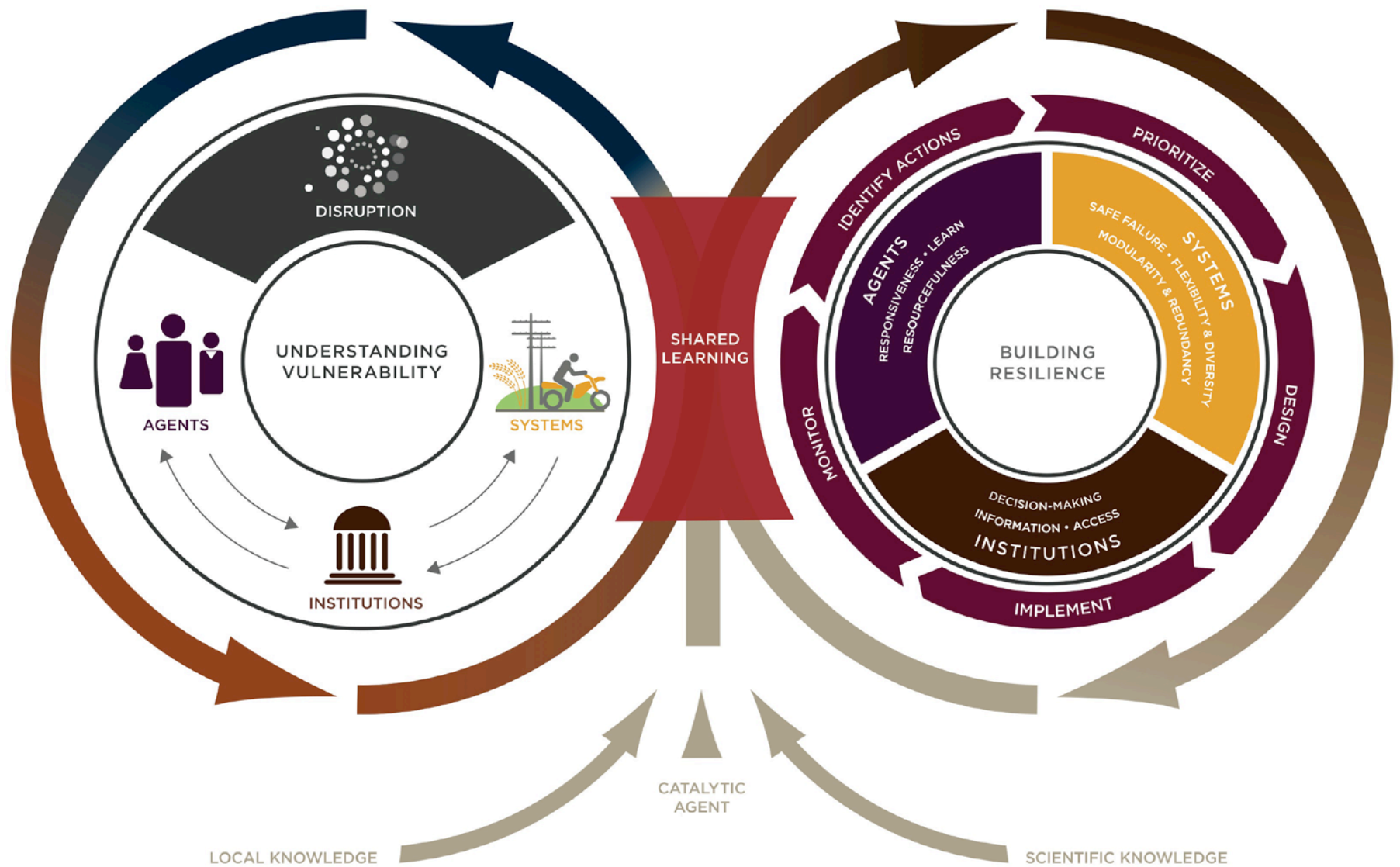
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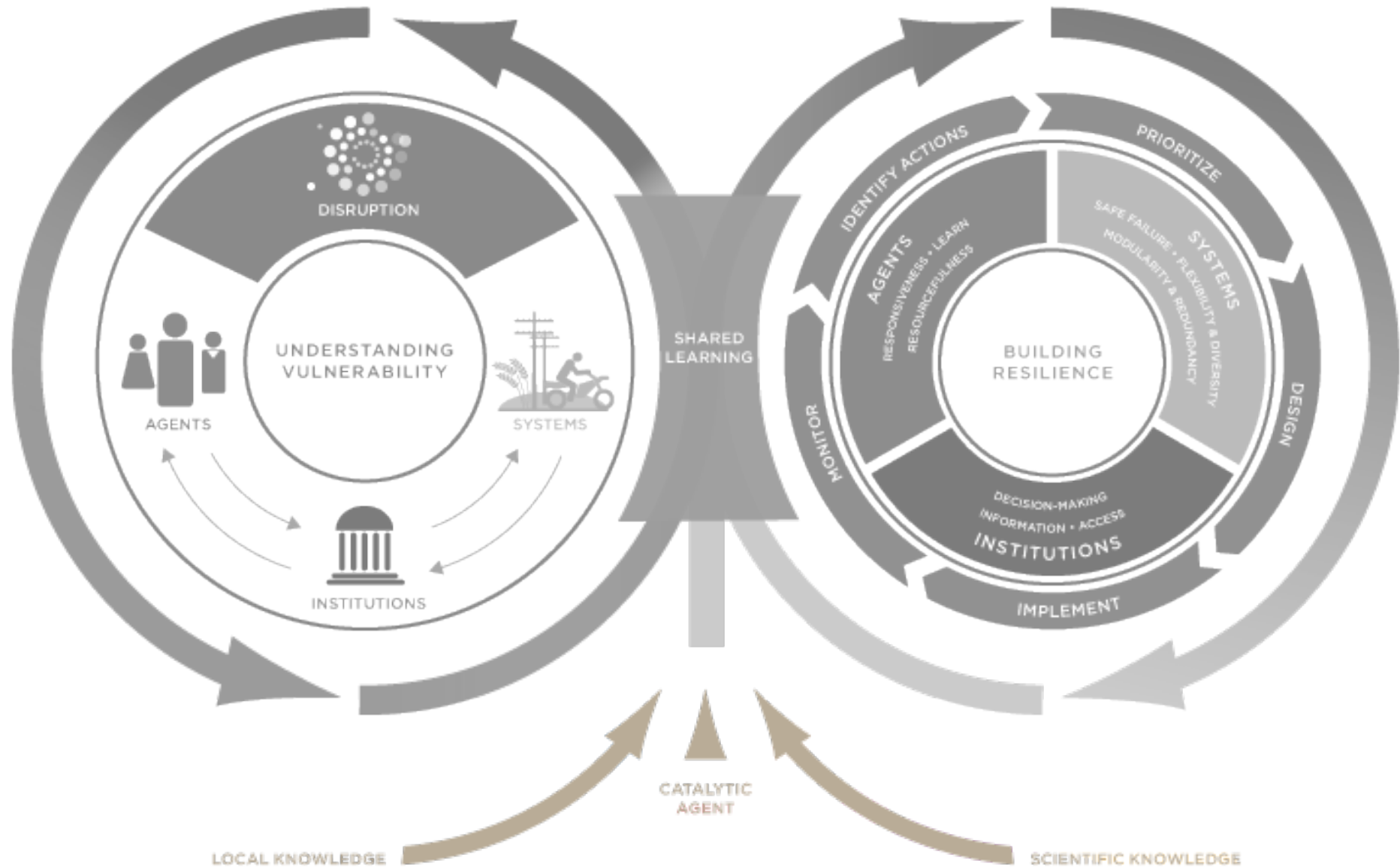


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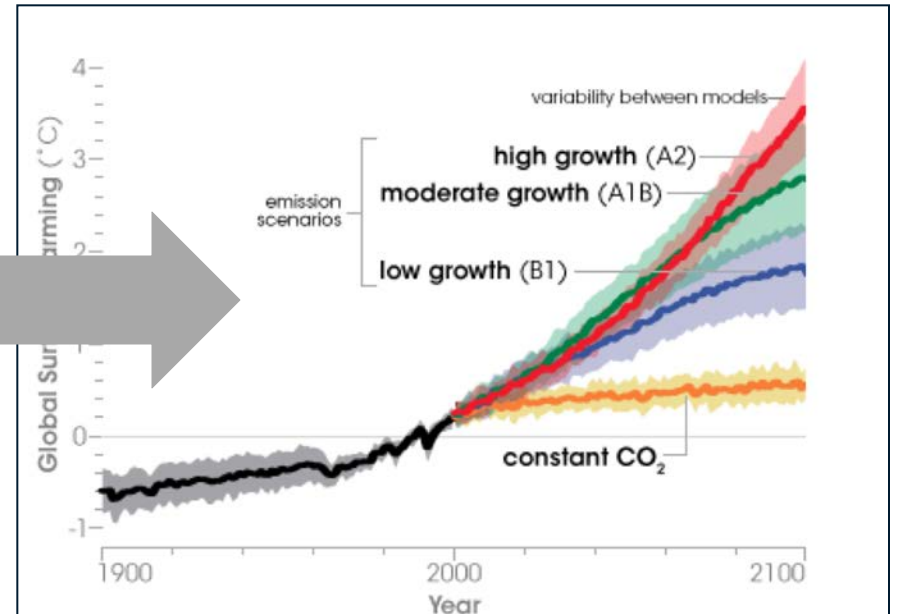
The Resilience Framework



## INPUTS TO FRAMEWORK

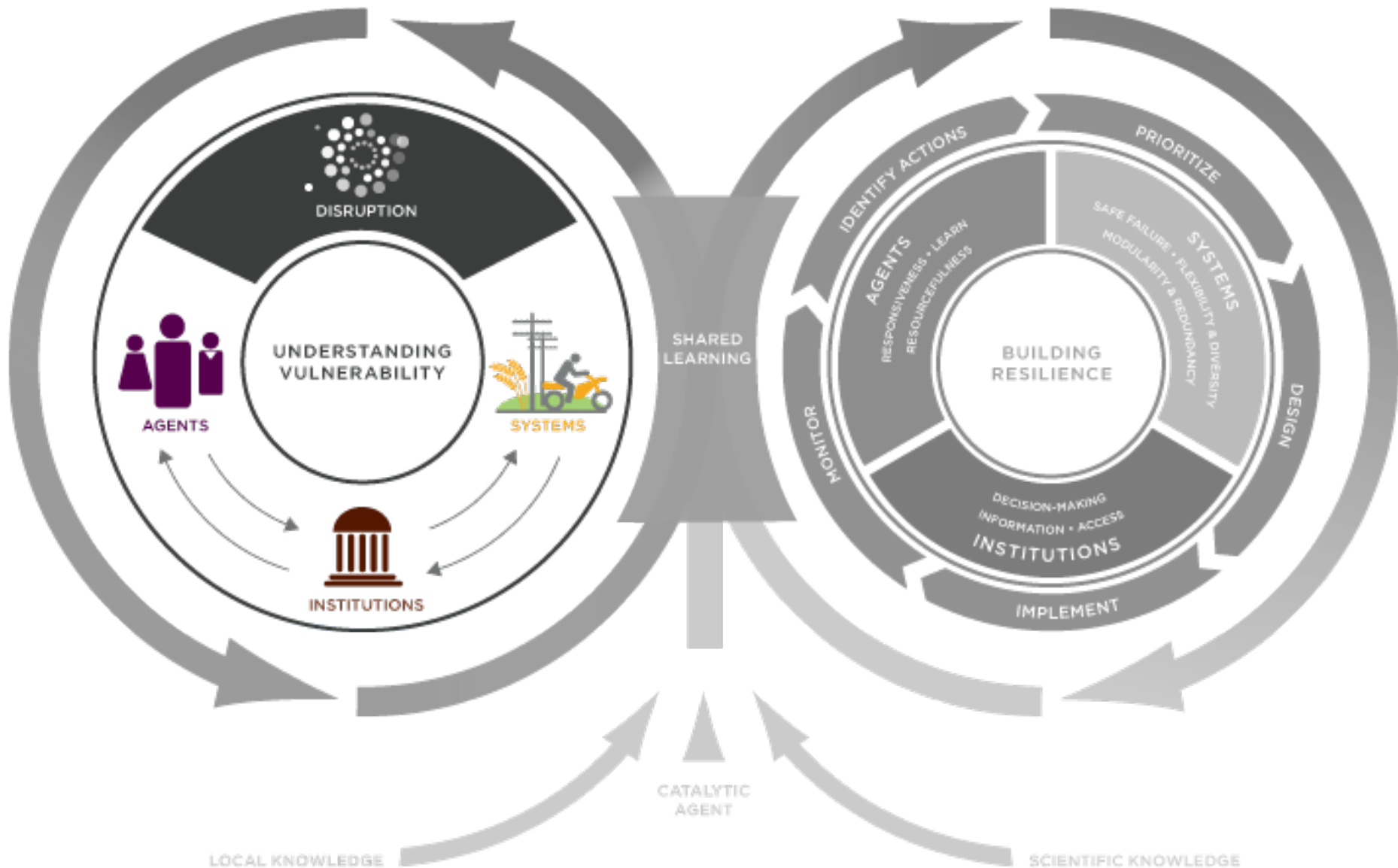


Local Knowledge

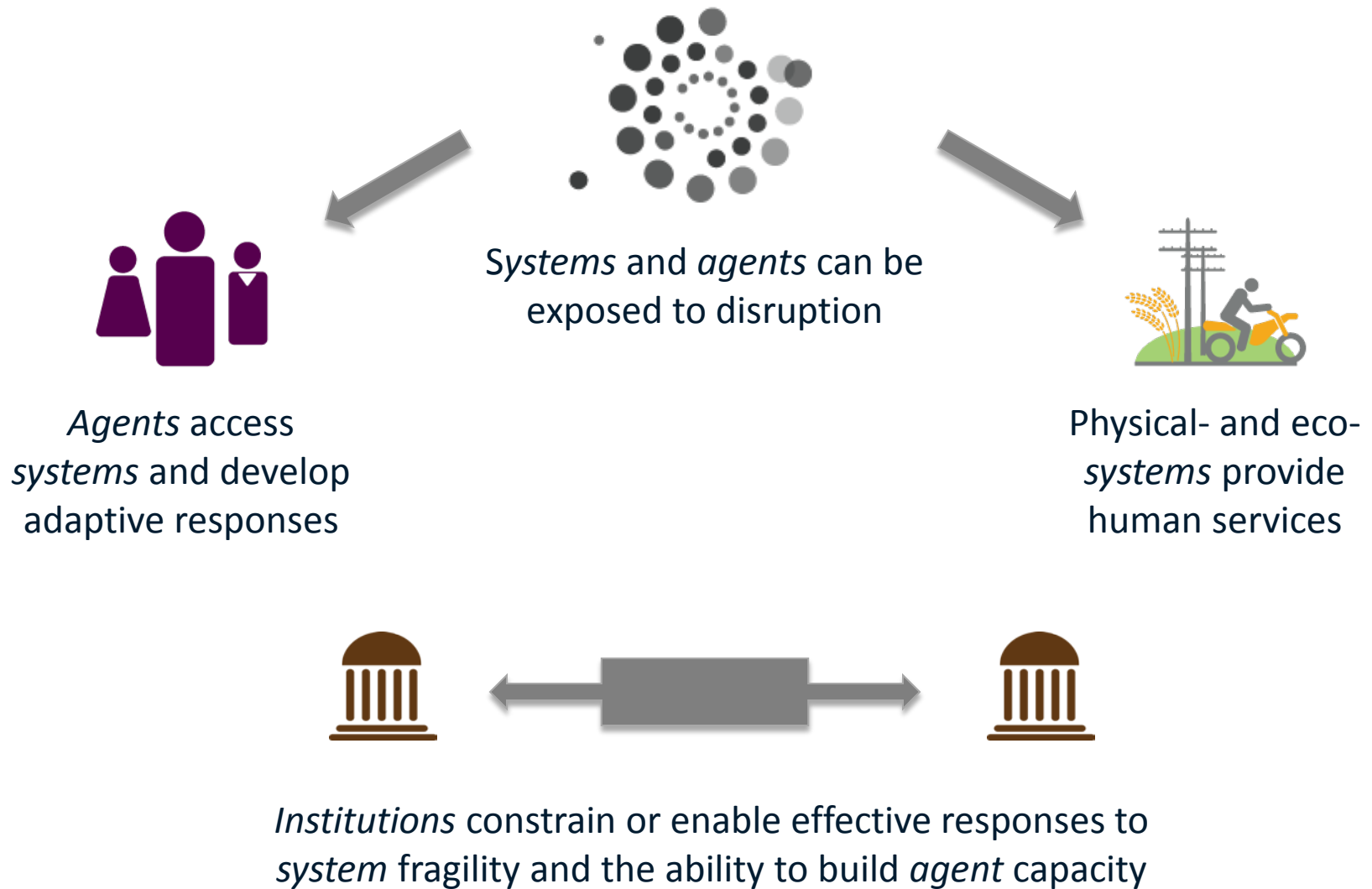


Scientific Knowledge

## INPUTS TO FRAMEWORK



## UNDERSTANDING VULNERABILITY



## 2 UNDERSTANDING VULNERABILITY



## **DISRUPTION**

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## **INSTITUTIONS**

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## **SYSTEMS**

Includes both physical infrastructure and ecosystems.

# **UNDERSTANDING VULNERABILITY**

Fragile systems  
low capacity agents  
weak institutions  
+ exposure or disruption  
  
**= VULNERABILITY**



## WHAT?

Urban systems:  
ecosystems,  
infrastructure,  
Knowledge?



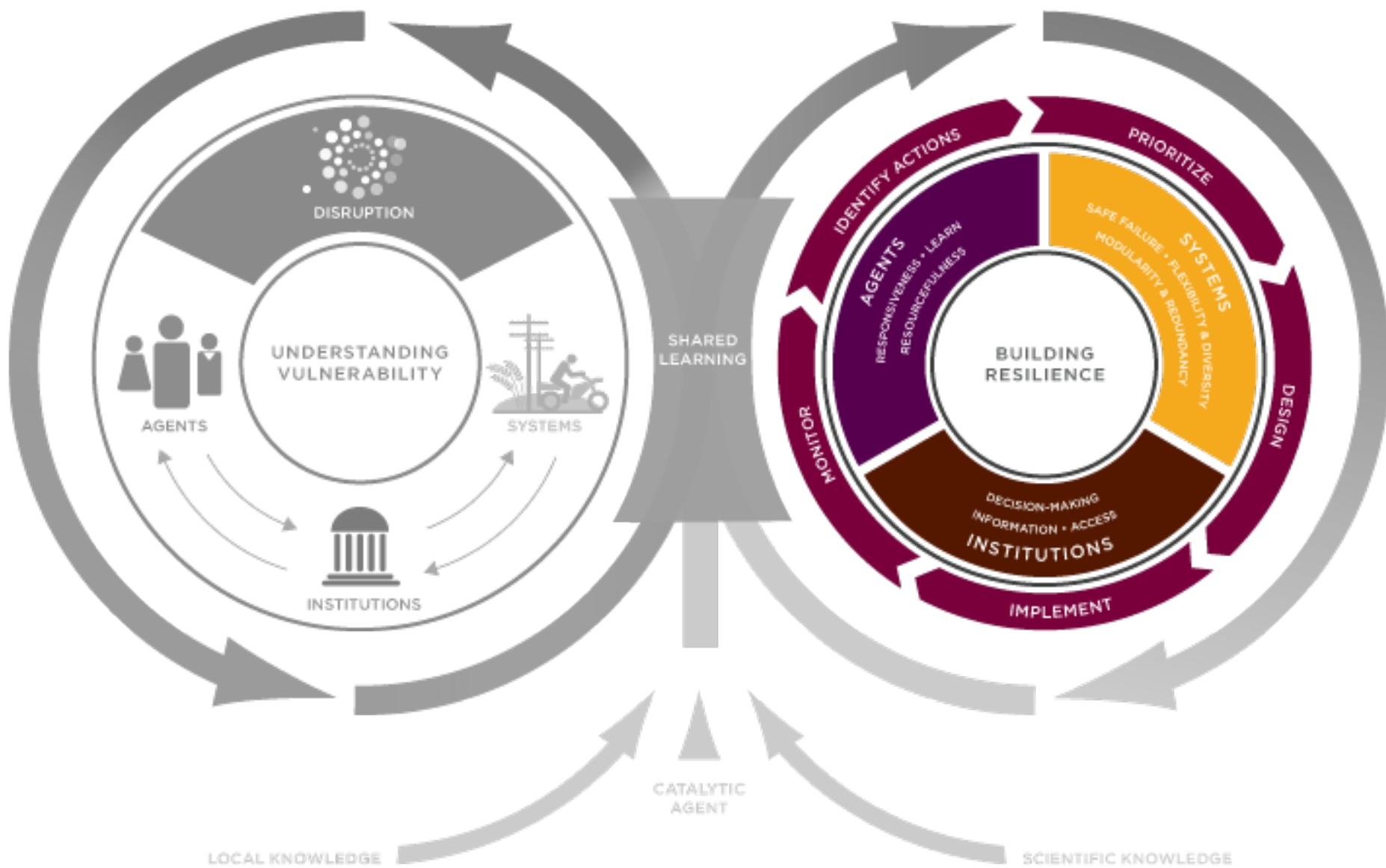
## HOW?

Institutions:  
rights and  
entitlements,  
decision-making,  
information?



## WHO?

Agents:  
what is their behavior,  
socio-economic position,  
and ability to take action?



**BUILDING RESILIENCE**

# Addressing Vulnerability



Reducing exposure  
Building capacity  
Decreasing sensitivity





## **PHYSICAL and ECO-SYSTEMS**

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Flexibility and Diversity  
Safe Failure



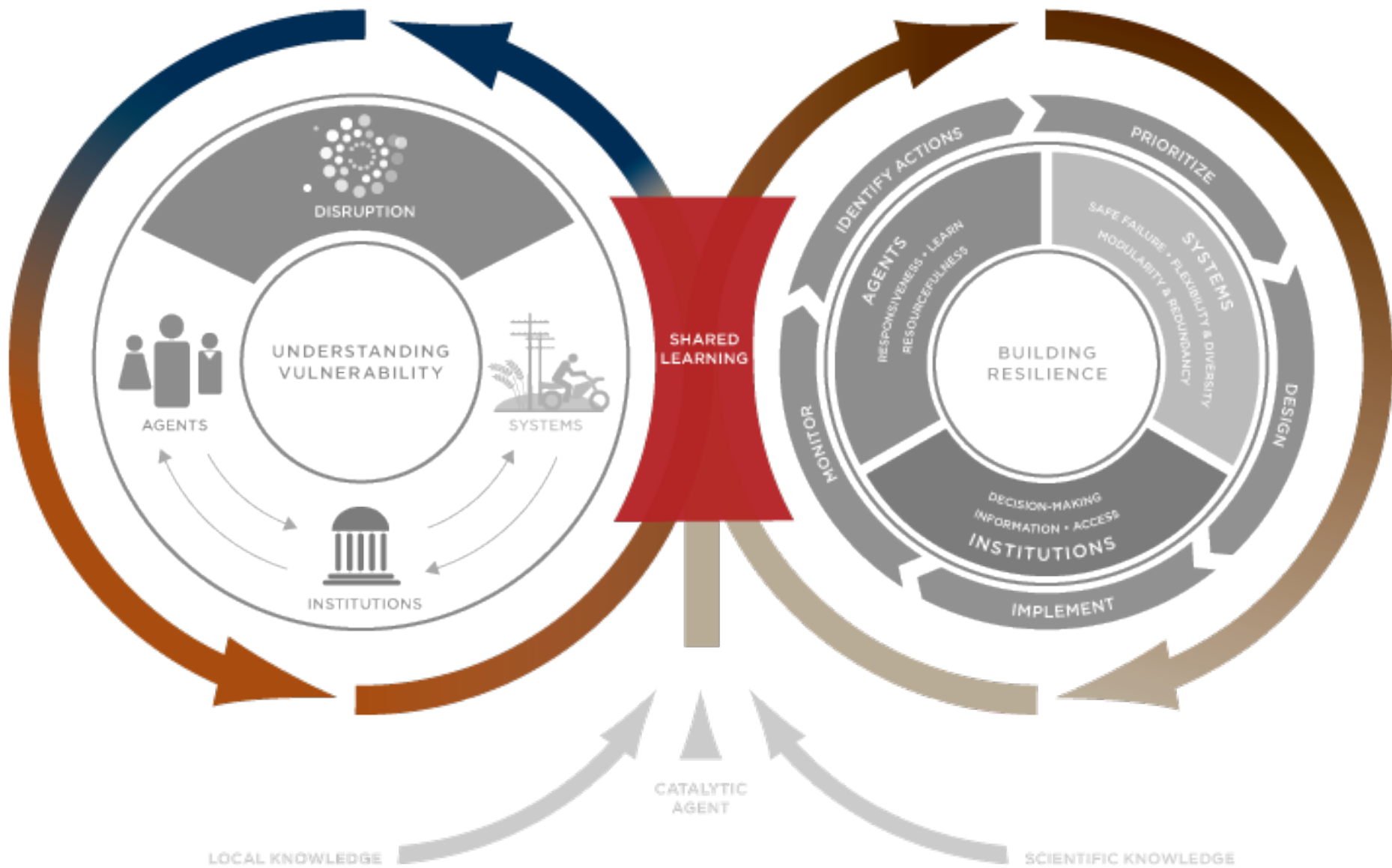
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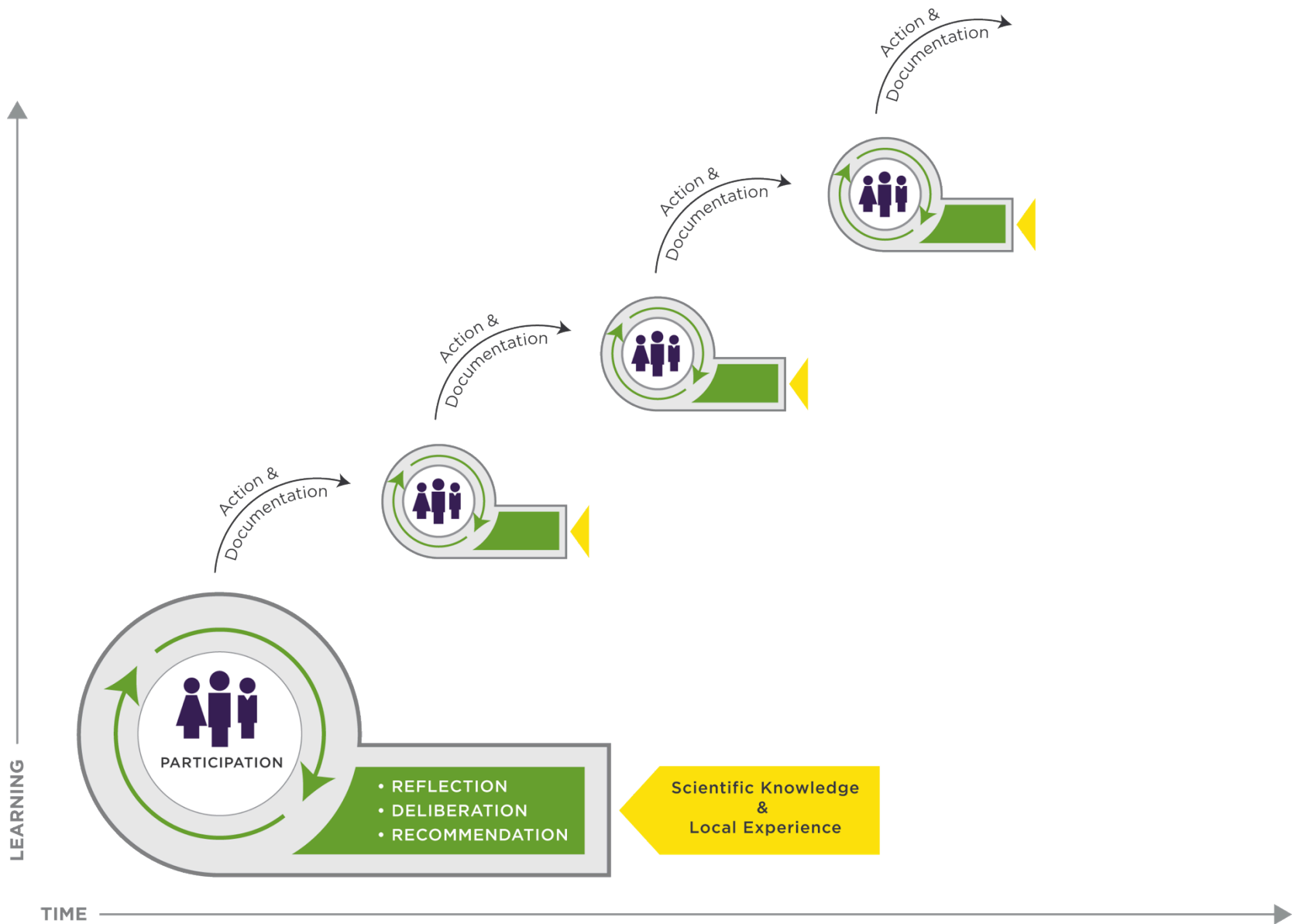


## **INSTITUTIONS**

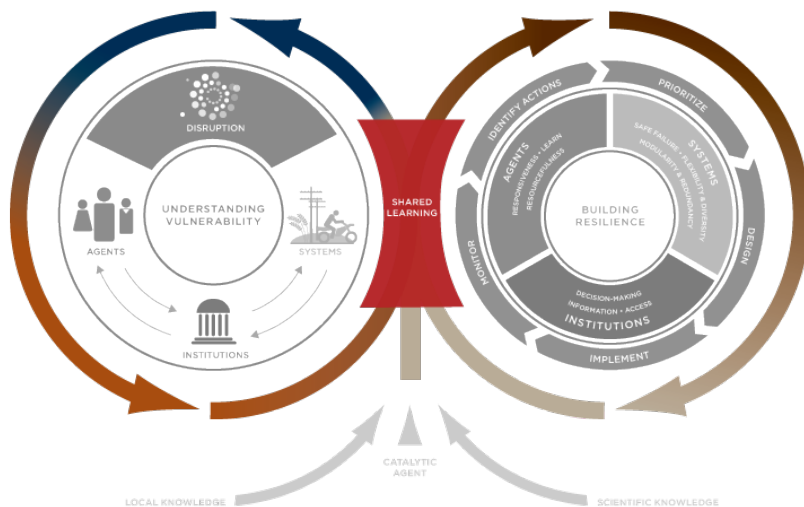
Inclusive  
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Adaptable  
Good Governance



## SHARED LEARNING DIALOGUES



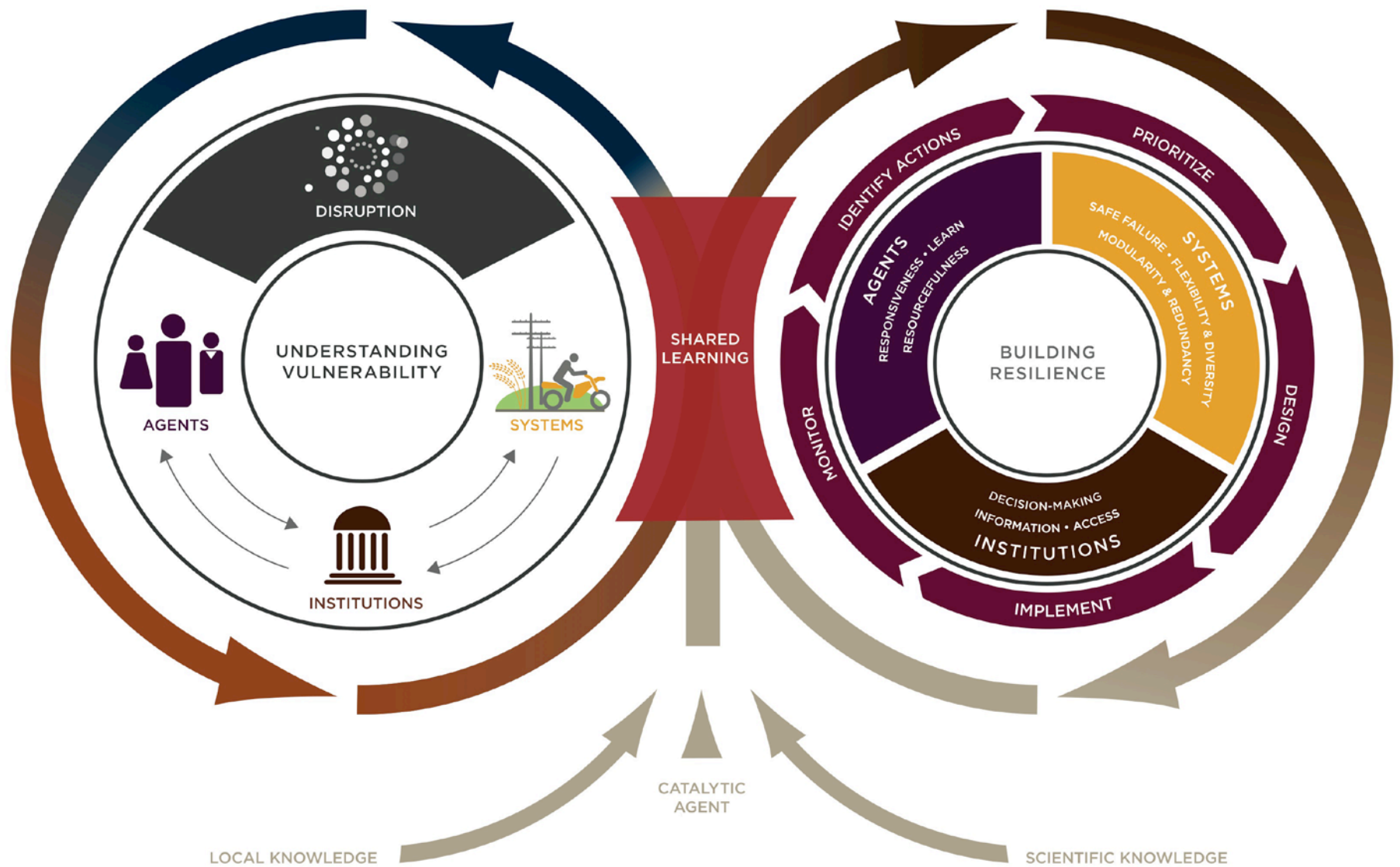
## SHARED LEARNING DIALOGUES



## CHARACTERISTICS OF SLDs

- **SHARING:** the stage and/or microphone; common purpose; and, to respond to the needs of others.
  - Everyone has an equal chance to speak, with confidence they will be heard
- **LISTENING** with mutual respect and purpose. .
- **LEARNING:** participants are engaged in a variety of ways to support different learning styles
- **DIALOGUE:** use of at least one dialogue technique
  - including FEEDBACK & EVALUATION

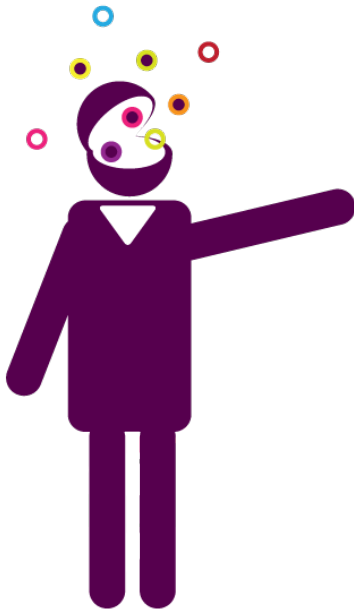
## SHARED LEARNING DIALOGUES



The Resilience Framework

# USING THE RESILIENCE FRAMEWORK CONCEPTUALLY

- Applicable at multiple scales and in rural and urban settings
- Recognize multiple sources of vulnerability
- Focus on strategic issues and processes rather than specific projects



# USING THE RESILIENCE FRAMEWORK IN PRACTICE

- Each activity part of an integrated, strategic approach
- Accommodate high uncertainty through iterative processes
- Develops overall picture and how the different pieces fit together
- Clear structure for prioritizing adaptation actions and integrating with other planning activities that is easily explained to decision-makers and funders



# Discussion: examples of resilience building





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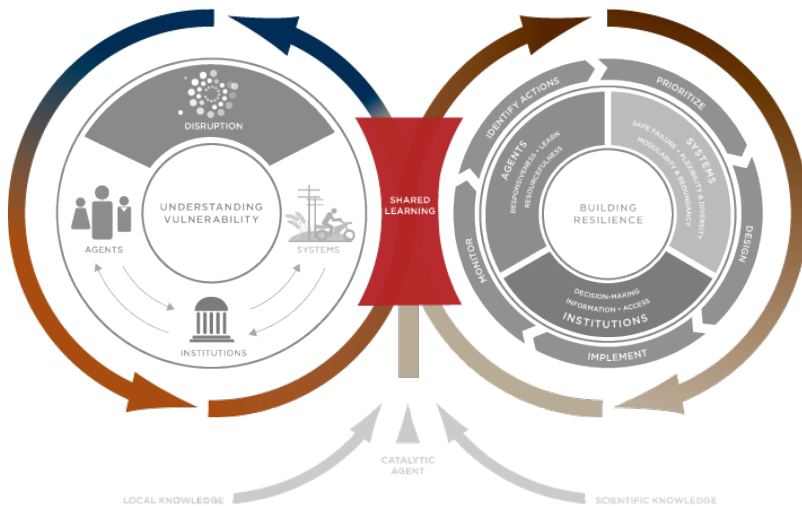


## **INSTITUTIONS**

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# Small group discussion: Effective engagement strategies





**Primarily about building relationship**

- **Committed individuals**
- **Designated staff**
- **Strong communication skills**

**SHARED LEARNING DIALOGUES**

# Using the Resilience Framework for Monitoring & Evaluation



# Example Indicators

- *Water Supply:*
  - Diversity of sources
  - Share of supply from groundwater
  - Frequency of quality failures
  - Capacity limits under stress
  - Alternatives to supply
  - Number of different sectors involved in water planning
  - Number of organizations involved in water planning
  - Accessibility to poor
  - Community involvement in setting water tariff
  - Public information about water supply and quality

# Example Indicators

- *Flood prevention and drainage*
  - Length of dikes
  - Protected forest area upstream
  - Area flooded
  - Diversity of drainage system
  - Green space as % of urban area
  - Flood vulnerability maps widely available
  - Integration of DRR plans from community to city level
  - Community participation in flood prevention plans
  - Community involvement in drain maintenance

# Big basket concepts...



**INSTITUTIONS**



**PHYSICAL and  
ECO-SYSTEMS**



**AGENTS**

**OUR APPROACH**

# Why these baskets?



**DISRUPTION**



**AGENTS**



**INSTITUTIONS**



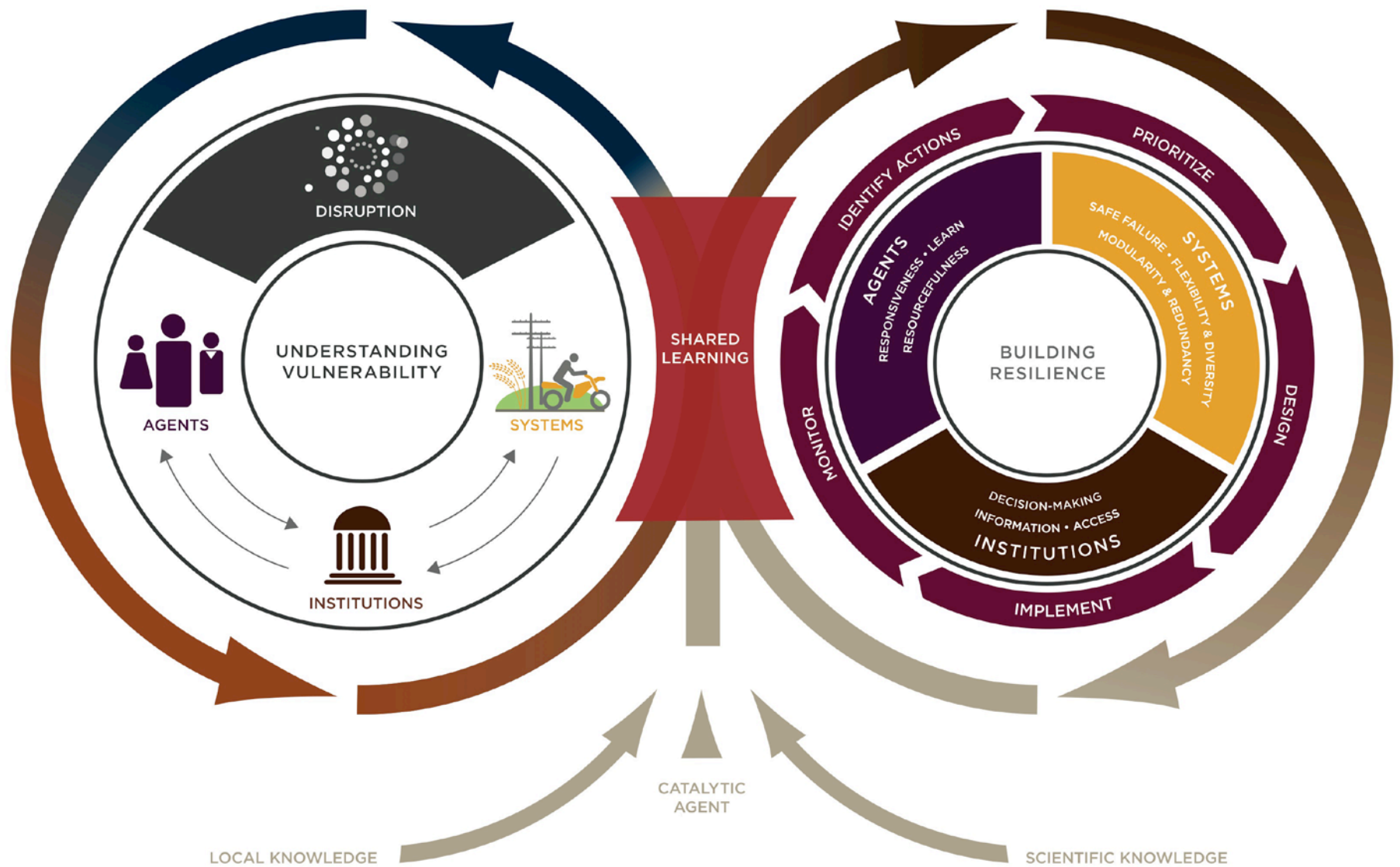
**SYSTEMS**

Existing expertise, theories of change, change management approaches monitoring & evaluation tools already exist in these categories

Using these 'baskets' to systematize your approach helps you quickly identify assets and gaps at *all* phases of the planning process

# Remember

Resilience;  
Change the way you think  
... Use what you already know  
(tools, strategies, methods and networks)



The Resilience Framework

# MANY THANKS!

For more information, please visit:

[www.i-s-e-t.org](http://www.i-s-e-t.org) & [Training.i-s-e-t.org](http://Training.i-s-e-t.org)

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